DOCUMENT RESUME

ED 398 979 JC 960 538

AUTHOR Sarkar, Gerlinde
TITLE Employment Prospects of Aboriginal Graduates from Technical Programs: A Four Year Trend Study.
INSTITUTION Saskatchewan Inst. of Applied Science and Technology, Saskatoon.
PUB DATE 2 Jun 95
NOTE 19p.; Paper presented at the Learned Societies Conference of the Canadian Society for the Study of Higher Education (Montreal, Quebec, Canada, June 2-3, 1995); for the 1994 follow-up study, see JC 960 539.
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Comparative Analysis; *Educational Benefits; *Employment Patterns; Foreign Countries; Graduate Surveys; *Indigenous Populations; Longitudinal Studies; Minority Groups; *Outcomes of Education; *Salaries; Technical Institutes; Trend Analysis; Two Year Colleges; Vocational Followup
IDENTIFIERS Saskatchewan Institute of Applied Sci and Techn

ABSTRACT

Each year since 1991, the Saskatchewan Institute of Applied Science and Technology (SIAST) has conducted a follow-up study of program graduates to compare information on employment outcomes for graduates of Aboriginal ancestry to those for all graduates. In 1994, a project was undertaken to analyze responses from the surveys conducted from 1991 to 1994 to determine trends in outcomes for Aboriginal graduates. The analysis revealed the following: (1) in 1991, 74.4% of the Aboriginal respondents were employed 6 months after graduation, compared to 77.9% for graduates overall, representing a differential of 3.5%; (2) in 1992, a year of recession in the province, this differential rose to 9%, suggesting that Aboriginal graduates were more affected by the economic downturn than graduates overall; (3) in 1994, 77 of the 1,600 respondents to the survey identified themselves as Aboriginal and 71.4% of these were employed, compared to 78.3% of graduates overall; (4) in 1991, 15% of both groups found employment outside of Saskatchewan, while by 1993 only 11% of Aboriginal graduates and 12% of graduates overall did so; and (5) the mean monthly salary for Aboriginal graduates was $1,743 in 1992, $1,682.85 in 1993, and $1,794.72 in 1994, while for all graduates in 1994 the mean monthly salary was $1,780.71. Data tables are included. (HAA)

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ED 398 979

Employment Prospects of Aboriginal Graduates from Technical Programs

A Four Year Trend Study

A Paper Prepared for the:

Canadian Society for the Study of Higher Education
Learned Societies Conference 1995

June 2 - 4, 1995

Université du Québec à Montreal
Montreal, Québec

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JC 960 538

Employment Prospects of Aboriginal Graduates from Technical Programs

A Four Year Trend Study

Gerlinde Sarkar

1.0 INTRODUCTION

The Saskatchewan Institute of Science and Technology (SIAST) is a provincial technical institute located in the four major cities in the province of Saskatchewan and provides province-wide career related education, training and retraining for adults. The aboriginal population in the province is the fastest rising group and, therefore, SIAST has initiated special measures to ensure that this group can participate fully in the educational opportunities that are provided to all Saskatchewan residents. But once these Aboriginal students graduate from SIAST programs are they given an equal chance in the job market? This question gave rise to a further analysis of the annual SIAST Graduate Employment Survey. The employment track record of Aboriginal SIAST students who graduated in 1991, 1992, 1993, and 1994 was compared to the SIAST graduates overall.

2.0 OBJECTIVES

The objective of the study is to provide information on graduates of Aboriginal ancestry who have completed certificate and diploma programs in a technical institute, and to determine whether their success rate of finding employment is similar to the employment rates of overall graduates from such programs.

3.0 DESIGN OF THE STUDY

All graduates from the four institutes of SIAST (Saskatchewan Institute of Applied Science and Technology) are surveyed every year to determine their success rate in finding employment. Questionnaires are mailed to all graduates approximately six months after graduation. A response rate of over 60% is generally achieved (68.2% response rate for the 1994 graduates from on-campus programs). Aboriginal graduates self-identify on the questionnaire, and the responses of these graduates are then analyzed separately and compared to the responses of graduates overall.

The relative proportion of aboriginal graduates responding to the questionnaire is also compared to the registrars' data on proportional percentages of aboriginal students enroled and graduating from each program to ensure that data are not biased due to differences in response rates.

This comparison has now been completed for the 1991, 1992, 1993, and 1994 graduates.

4.0 STUDY FINDINGS

About 7% of all SIAST graduates have identified themselves as being of aboriginal ancestry on the questionnaires. This is comparable to the percent of graduates who are of aboriginal ancestry according to the registrars' records for SIAST overall.

The findings of the four studies (1991, 1992, 1993, and 1994 graduates) seem to indicate that Aboriginal graduates from SIAST programs are more affected by downturns in the economy than the graduates overall. However, having taken a technical training program gave the aboriginal graduates an advantage over the general aboriginal population. According to the 1991 Statistics Canada Aboriginal Peoples Survey, the unemployment rate for all Saskatchewan Aboriginal people was 27%[1] compared to 7%[2] for all Saskatchewan residents. Education and training has definitely narrowed the gap.

4.1 Employed Graduates

Employment is affected by the general economic condition of the province and this has affected the success rate of finding employment. We found that a worsening in the economy has affected the aboriginal graduates more severely.

4.1.1 Employment Rates

From the 1991 Aboriginal graduates who replied to our survey, 74.4% found employment compared to 77.9% of the graduates overall, a differential of only 3.5%. However, in Saskatchewan the recession worsened in 1992 and when the 1992 graduates started to look for work, the labour market was down. From the 1992 Aboriginal graduates who replied to our survey, 65% found employment compared to 74% of the SIAST graduates overall, a difference of 9%. The prospects improved a little for the 1993 graduates; 68% of the Aboriginal graduates found employment compared to 76% overall, a difference of 8%. The economy is now improving in Saskatchewan and the 1994 graduates have recovered somewhat; 78.3% of all graduates were employed six months after employment compared to 71.4% of Aboriginal graduates, a 6.9% differential.

Table 1 Present Employment Status

	1994 All Graduates		1994 Aboriginal Graduates		1993 Aboriginal	1992 Aboriginal
	#	%	#	%	%	%
Employed	1252	78.3	55	71.4	67.5	65.2
Full time	904	56.5	43	55.8	42.2	40.0
Part time	253	15.8	8	10.4	24.1	29.2
Self employed	95	5.9	4	5.2	1.2	0.0
Not Employed	348	21.8	22	28.6	32.5	34.8
Unemployed	204	12.8	13	16.9	21.7	24.7
Not looking for work	144	9.0	9	11.7	10.8	10.1
Total	1600	100.0	77	100.0	100.0	100.0

[1] Statistics Canada. 1991 Aboriginal Peoples Survey: Schooling, Work and Related Activities, Income, Expenses and Mobility, September 1993.

[2] SIAST, Research and Development. Economic Overview 1995, February 1995.

4.1.2 Seasonal and Part-time Employment

In the first study (1991 graduates), Aboriginal graduates were more frequently seasonal workers, part-time employed and in non-training related employment. If aboriginal graduates are not working full-time, it is less likely by choice. 11.6% of the 1992 graduates overall who are not working full-time indicated that this is by choice, compared to only 4.3% of similar Aboriginal graduates. This trend is reversing, however, and more and more graduates (from both groups) indicate that they would like to have their own business. We must exercise caution with the percentages, however, since they represent a very low number of respondents.

Table 2 If not working full time, is this by choice?

	1994 All Graduates		1994 Aboriginal Graduates		1993 Aboriginal	1992 Aboriginal
	#	%	#	%	%	%
Yes	59	24.0	1	12.5	22.2	4.3
No	187	76.0	7	87.5	77.8	95.7
Total	246	100.0	8	100.0	100.0	100.0

Table 3 Reasons for Being Self-employed

	1994 All Graduates		1994 Aboriginal Graduates	
	#	%	#	%
Family responsibilities	8	8.7	0	0.0
Can work and continue training	2	2.2	0	0.0
No other jobs available	18	19.6	1	25.0
Wish to have own business	37	40.2	3	75.0
Other reasons	27	29.3	0	0.0
Total	92	100.0	4	100.0

4.1.3 Location of Employment

Do graduates have to leave the province to find employment? Of those responding to the survey, 11% of the 1993 Aboriginal graduates found employment outside Saskatchewan, compared to 12% overall; this is down from 15% for both groups in 1991. The outflow of Saskatchewan residents leaving the province to go west in search of work has now been reversed; there is a trend of former Saskatchewan residents who had left the province in the late 80's and early 90's to return to Saskatchewan. This is reflected in our statistics. For the 1994 responding graduates, only 7.8% (and 9.1% for aboriginal graduates) had found employment outside the province. (Generally 40% of university graduates leave the province to find employment according to the University of Saskatchewan Fact Book.) Generally, Regina absorbed the largest percentage of Aboriginal graduates followed by Prince Albert. This changed somewhat for the 1994 graduates. There was a significant increase in employment opportunities for aboriginal graduates in Saskatoon; 38% of the 1994 employed aboriginals found employment in Saskatoon, up from 17.8 % in 1993 and 6.9% in 1992.

4.1.3.1 On/Off Reserve Employment

Finding employment in Saskatchewan's largest cities dispels the notion that Aboriginal graduates find employment primarily on reserves; however they are often employed by a government agency whose prime focus is on Aboriginal people, about 11% of all that found employment.

Not all employed Aboriginal graduates answered the question as to whether or not they work on a reserve, but from those who did only 16.7% said they are employed on a reserve.

About 13% of all employed aboriginal graduates have an aboriginal organization as an employer.

Table 4 Location of Employment - On/Off Reserve

	1994 Aboriginal Graduates	
	#	%
On reserve	6	16.7
Off reserve	30	83.3
Total	36	100.0

Table 5 Type of Employer

	1994 Aboriginal Graduates	
	#	%
An Aboriginal organization	7	50.0
An Aboriginal owned/operated business	1	7.1
A government agency whose prime focus is Aboriginal people	6	42.9
Total	14	100.0

4.1.4 Length of Time in Finding Employment

On average, the Aboriginal graduates took two to three weeks longer to find a job and their average wage was slightly lower. On average, the Aboriginal graduates are older (29 compared to the average age of 26 for SIAST graduates who responded to the survey).

4.1.4.1 Number of Attempted Employment Opportunities

On average, graduates applied for over 23 employment opportunities, with a median of 8, compared to 9 application and a median of 4 for the aboriginal graduates. The median employment interviews was two for both groups.

4.2 Training Related Employment

Of the graduates who found employment, nearly 80% responded that the work they are doing now is directly related to the training they received.

Table 6 Present Job/Primary Job Directly Related to Education/Training Received

	1994 All Graduates		1994 Aboriginal Graduates		1993 Aboriginal	1992 Aboriginal
	#	%	#	%	%	%
Yes	993	79.3	45	81.8	75.0	82.8
No	259	20.7	10	18.2	25.0	17.2
Total	1251	100.0	55	100.0	100.0	100.0

4.2.1 Wage and Salary Levels

We were also interested to find out how the Aboriginal Graduates compared to graduates overall with regard to the wage and salary levels. In the Statistics Canada 1991 Aboriginal Peoples Survey, it was noted that the incomes among Aboriginal people are disproportionately low. 61% of Aboriginal people in Saskatchewan have incomes below $10,000, twice as many as the general population. 13% have incomes from $20,000 to $40,000 range (considered to be middle class) compared to 26% of the general Saskatchewan population.

In our study, we found that receiving a certificate or training eliminated this gap. Once Aboriginal graduates were hired, they received very comparable wage levels.

Responses indicating salaries and wages for part-time employed graduates were eliminated in the analyses of the average salary ranges. We also looked at hourly wage rates for these groups and again found no significant difference between aboriginal graduates and the graduates overall.

Over the years, the highest monthly salary is consistently attributed to the graduates from the Dental Hygiene program. There were two aboriginal graduates from this program which has an intake capacity of 24.

Table 7 Monthly Salary Before Deductions for Full-time Training Related Employment

	1994 All Graduates	1994 Aboriginal	1993 Aboriginal	1992 Aboriginal
Minimum	$400.00	$816.00	$800.00	$700.00
Maximum	$5,600.00	$4,000.00	$3,396.00	$2,500.00
Mean	$1,780.71	$1,794.72	$1,682.85	$1,743.00

4.3 Unemployed Respondents

We should note that a number of graduates are **not looking for work** for a number of reasons, usually to return to school, and thus we should really look at the unemployment rates. If we look at this group, the gap is much narrower; 12.8% of the 1994 graduates were unemployed at the time of the survey compared to 16.9% of aboriginal graduates (4.1% differential). This differential was similar for 1993 graduates (17.8% unemployed for overall graduates compared to 21.7% for aboriginal, and 21.7% for 1992 graduates compared to 24.7%). These rates are given at the time of the survey (six months after graduation); some graduates may have been employed at some time, but are no longer at the time of the survey.

The gap between unemployment rates for SIAST graduates overall and aboriginal graduates varies between 3-4% over the four year time span, compared to a 20% gap in these rates in the total population statistics for these groups as explained in section 4.0.

Not having enough experience and no available jobs are the main reasons for not being able to find employment.

4.3.1 Now Unemployed, but Worked Since Graduation

A significant number of graduates have worked since graduation, but are unemployed at the time of the survey. About half of these expect to be recalled for work. There is no significant difference between Aboriginal graduates and the graduates overall.

Table 8 Worked Since Completing Training Program

	1994 All Graduates		1994 Aboriginal Graduates		1993 Aboriginal	1992 Aboriginal
	#	%	#	%	%	%
Yes	184	53.2	12	54.5	55.6	51.7
No	162	46.8	10	45.5	44.4	48.3
Total	346	100.0	22	100.0	100.0	100.0

4.3.2 Not Looking for Work

The main reason why students are not in the labour force, in other words not actively looking for work, is that they have returned to school or because of family responsibilities. The percent of aboriginal students who have chosen to return to school has risen over time to 78% in 1994 from 55% in 1992, for those that are not looking for work.

4.4 Reasons for Taking Training

Aboriginal graduates were more likely to state that "obtaining employment in the field" and "updating job skills" were the reasons for taking the training program; they were less likely to state that "change of career" was a reason.

Aboriginal graduates rated the overall quality of the training higher and also a higher percentage of Aboriginal respondents indicated that the program content provided them with the skills and knowledge necessary for a training-related job. (93% of Aboriginal graduates compared to 89% overall.)

5.0 STUDENT CHARACTERISTICS

Enrolment and graduation statistics are taken from the Education Equity Monitoring Report as provided by the four registrars' offices.

5.1 Enrolment

Table 9 Percentage of Aboriginal Students in Total Enrolment at SIAST in 1994

	All	Aboriginal Students	
	#	#	%
Kelsey (Saskatoon)	1504	113	7.5
Palliser (Moose Jaw)	1727	50	2.9
Wascana (Regina)	1693	108	6.4
Woodland (Prince Albert)	1108	253	22.8
Total at SIAST	6032	524	8.7

5.2 Graduates

Table 10 Percentage of Aboriginal Graduates in Total Graduates at SIAST in 1994

	All	Aboriginal Students	
	#	#	%
Kelsey (Saskatoon)	1394	83	6.0
Palliser (Moose Jaw)	1525	34	2.2
Wascana (Regina)	929	38	4.1
Woodland (Prince Albert)	324	56	17.3
Total at SIAST	4172	211	5.1

5.3 Age

On average the Aboriginal graduates are older; 29 (27 in 1994) compared to the average age of 26 for SIAST graduates who responded to the survey.

Table 11 Age

	1994 All Graduates		1994 Aboriginal Graduates		1993 Aboriginal	1992 Aboriginal
	#	%	#	%	%	%
Minimum	17		18		19	19
Maximum	61		47		55	54
Mean	25.2		26.8		29.5	28.0
Less than 20	222	14.0	6	8.0	1.3	3.8
20 - 24	780	49.3	30	40.0	36.3	37.5
25 - 34	391	24.7	28	37.3	37.5	41.3
35 - 54	188	11.9	11	14.7	23.8	17.5
55 +	2	0.1	0	0.0	1.3	0.0
Total	1251	100.0	55	100.0	100.0	100.0

5.4 Gender

The proportion of male to female graduates remains a relatively stable 50/50 split over the years and is similar for Aboriginal graduates.

5.5 Type of Aboriginal Ancestry

The largest proportion of Aboriginal graduates are Métis at 63% and about 22% are Status/Treaty Indian or also called "First Nations" Indian.

Table 12 Type of Aboriginal Ancestry

	1994 Aboriginal Graduates	
	#	%
Status/Treaty Indian	16	21.9
Métis	46	63.0
Other	11	15.1
Total	73	100.0

6.0 IMPORTANCE OF THE STUDY

Saskatchewan has a high percentage of people with Aboriginal ancestry and this group is growing. Of the total Saskatchewan population about 25% are under 15 years old; however, among the Aboriginal population the under 15 year old cohort is about 43%. This means that the participation of Aboriginals in post-secondary institutions and in the labour force will increase.

The studies summarized above show that education and training eradicates some of the documented differences in employment and income levels between the Aboriginal population and the population overall. Obtaining a certificate or diploma from a technical institute has an equalizing effect on the opportunities to participate in the labour market.

SIAST has a comprehensive Education Equity Policy in place which is a process that allows SIAST to identify and then remove or reduce barriers to post-secondary education so that all Saskatchewan residents may enjoy fair and equal opportunity to participate in and successfully complete SIAST programs. The Equity Program is designed to provide equal access to education to all Saskatchewan adults, with a special focus on aboriginal students, students with disabilities, female students in non-traditional programs and visible minorities.

The objectives of this Education Equity Policy are clearly stated and carefully monitored to give aboriginal students a fair chance of succeeding and graduating in the educational program they have chosen. But if we find that once Aboriginal students have successfully completed their programs and they are not accepted at the same rate into the work place as other graduates, emphasis must be placed on this transition from technical institute to the work place. It is not sufficient to ensure equity groups equal educational opportunities, but ultimately they must receive equitable treatment in the workplace (given that they have the same qualifications). It then becomes our responsibility to ensure that potential employers know that **all** graduates have met the requirements of the program and must be given an equal chance to prove that they have the skills to do the work.

7.0 CONCLUSION

Well, how did the Aboriginal graduates fare? Do Aboriginal graduates have a fair chance at employment? True, on average the Aboriginal graduates took two to three weeks longer to find a job and the employment level is slightly lower, but their average salary or wage rate was comparable to the overall SIAST graduates.

The findings of this study are very encouraging. Looking at the unemployment rates between Aboriginal graduates and overall SIAST graduates, the gap remained between 3-4%. Compared to the provincial statistics of a gap of 20% between these groups, it shows that education can lower the gap and inequities in employment and wages between these two groups.

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Appendix A:

Program of Study for Aboriginal Graduates

Program of Study for Aboriginal Graduates

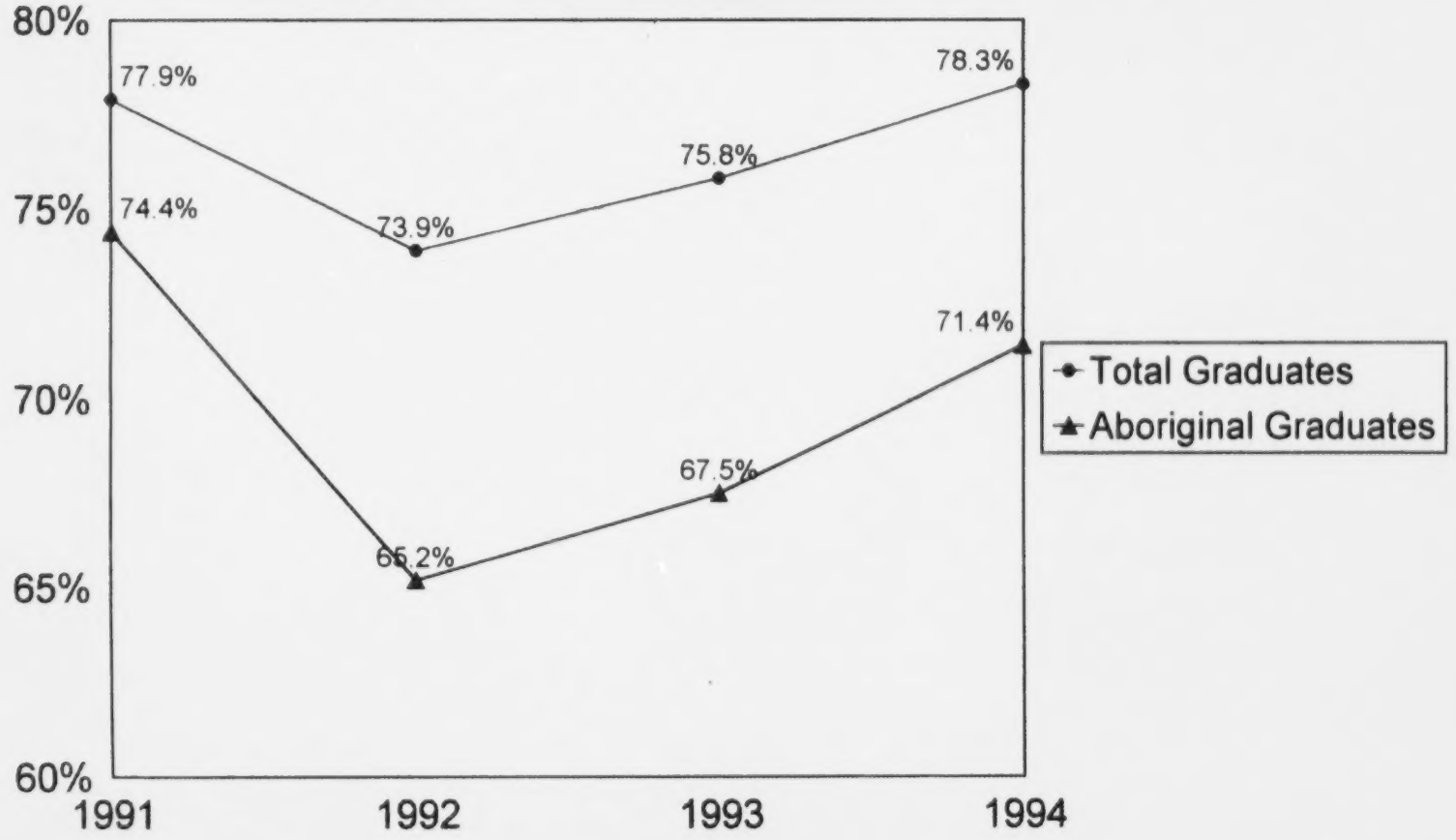
	Institute	Division	#	%
Certified Combined Technician	Kelsey	Health	1	1.3
Diploma Nursing	Kelsey	Health	8	10.4
Auto Body Technician	Kelsey	Industrial	2	2.6
Automotive Service Technician	Kelsey	Industrial	1	1.3
Heavy Equipment Mechanics	Kelsey	Industrial	1	1.3
Machine Shop	Kelsey	Industrial	1	1.3
Welding	Kelsey	Industrial	1	1.3
Early Childhood Development (Cert.)	Kelsey	Service	1	1.3
Early Childhood Development (Dip.)	Kelsey	Service	1	1.3
Food Services Administration	Kelsey	Service	1	1.3
Home Care/Special Care Aide	Kelsey	Service	1	1.3
Hotel and Restaurant Administration	Kelsey	Service	1	1.3
Library Technician	Kelsey	Service	2	2.6
Professional Cooking	Kelsey	Service	1	1.3
Recreation and Leisure Diploma	Kelsey	Service	1	1.3
Rehabilitation Worker (Certificate)	Kelsey	Service	1	1.3
Youth Care Worker (Certificate)	Kelsey	Service	2	2.6
Youth Care Worker (Diploma)	Kelsey	Service	1	1.3
Animal Health Technology	Kelsey	Technology	1	1.3
CAD/CAM Engineering Technology	Kelsey	Technology	1	1.3
Computer Systems Technology	Kelsey	Technology	3	3.9
Accountancy	Palliser	Business	1	1.3
Administration	Palliser	Business	1	1.3
Public Administration	Palliser	Business	1	1.3
Automotive Service Technician	Palliser	Industrial	2	2.6
Architectural Engineering Technology	Palliser	Technology	1	1.3
Instrumentation Engineering Technology	Palliser	Technology	1	1.3
Office Education	Wascana	Business	2	2.6
Dental Assisting	Wascana	Health	1	1.3
Dental Hygiene	Wascana	Health	2	2.6
Diploma Nursing	Wascana	Health	4	5.2
Psychiatric Nursing	Wascana	Health	1	1.3
Welding	Wascana	Industrial	2	2.6
Electronic Communications Technology	Wascana	Technology	1	1.3
Audiovisual Technician	Woodland	Industrial	1	1.3
Carpenter	Woodland	Industrial	3	3.9
Electrician	Woodland	Industrial	1	1.3
Heavy Equipment Mechanics	Woodland	Industrial	2	2.6
Micro-Electronics Technician	Woodland	Industrial	2	2.6
Outdoor Power Equipment Technician	Woodland	Industrial	1	1.3
Electronics Service Technician	Woodland	Industrial	1	1.3
Truck and Transport Mechanical Repair	Woodland	Industrial	3	3.9
Corrections Worker	Woodland	Service	1	1.3
Cosmetologist	Woodland	Service	1	1.3
Early Childhood Dev. Worker (Cert.)	Woodland	Service	1	1.3
Early Childhood Dev. Worker (Dip.)	Woodland	Service	1	1.3
Short Order Cook	Woodland	Service	1	1.3
Weaver	Woodland	Service	1	1.3
Integrated Resource Management	Woodland	Technology	3	3.9
Total			77	100.0

Appendix B:

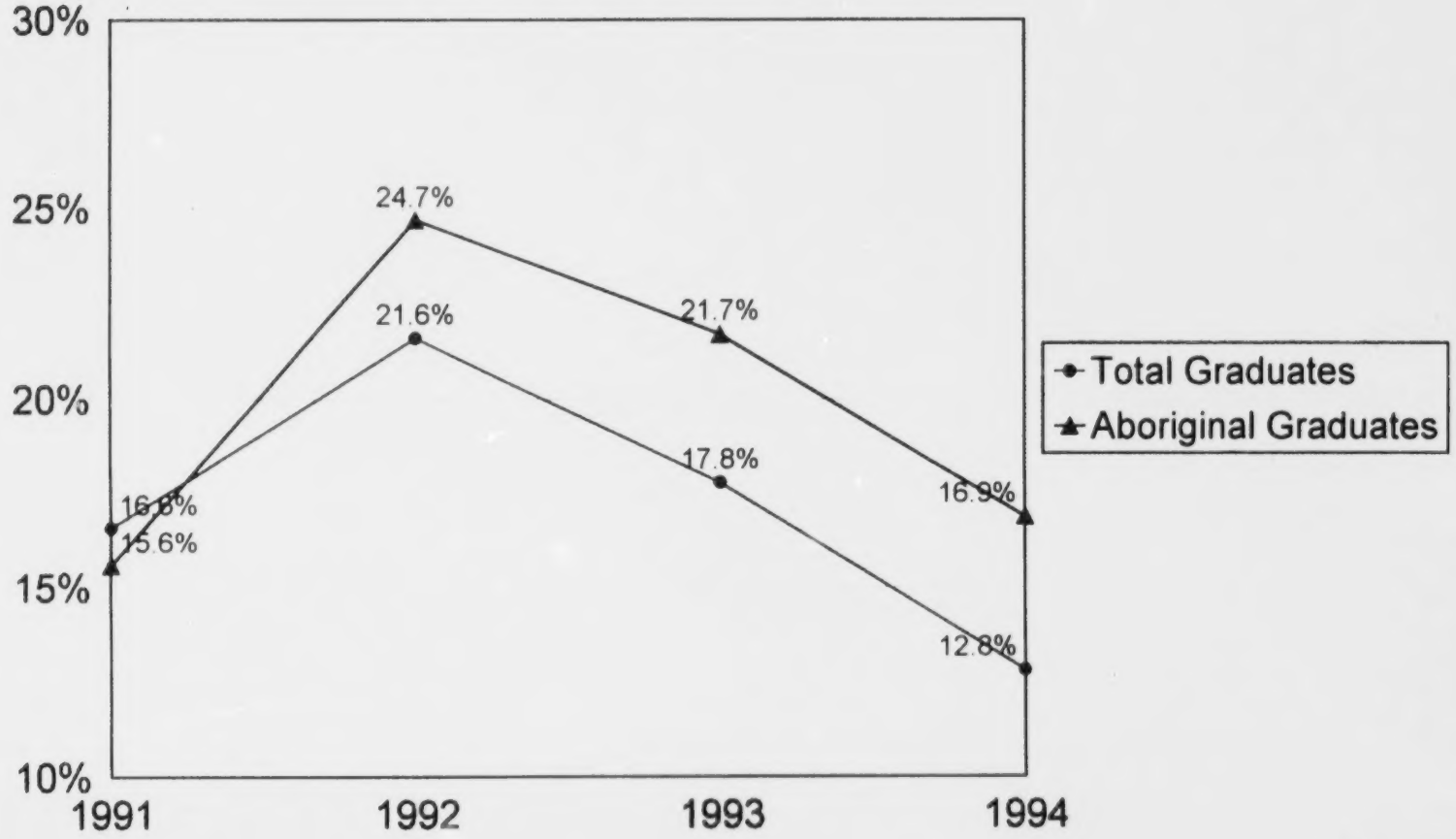
Graphs for "Total Employed" and "Unemployed"

Total Employed

Full Time, Part Time and Self Employed



Unemployed


30%
25%
20%
15%
10%
1991
1992
1993
1994
24.7%
21.6%
21.7%
17.8%
16.9%
16.6%
15.6%
12.8%
Total Graduates
Aboriginal Graduates